PROMISE VTrak E-Class RAID Subsystem

PROMISE® TECHNOLOGY, INC.

VTrak E-Class Advantages

- Best in class price performance
- High availability design
- SAS/SATA drive support
- Scalability up to 80-bays totaling 160TB
- Qualified Solution for Mac OS, Xsan and Final Cut Pro

Why Promise

The Promise VTrak E-Class RAID subsystem has been designed to provide industry leading performance and reliability for mission critical environments at an affordable price. The fully redundant design provides data protection and availability even if a component should fail. Promise offers the storage industry's best phone and email support along with a 3-Year advance replacement warranty. This provides VTrak users uninterrupted productivity for the life of the product.

No other solution provides this combination of performance, affordability and support.

Affordable Enterprise – Class Storage

The PROMISE VTrak E-Class RAID subsystem is a High Availability (HA) RAID solution developed to meet the needs of mission critical enterprise and power today's demanding video workflows. At the heart of the PROMISE VTrak E-Class RAID subsystem is a mature RAID engine developed over the course of two decades and four generations of code that delivers cutting-edge performance and data integrity features rivaling any competitor.

Video Performance

VTrak E-Class truly shines in video environments by delivering consistent low latency performance without dropping frames. Used with Xsan in film and video postproduction, VTrak E-Class can help increase user productivity by providing scalable performance and massive capacity to support today's demanding video workflows.

Data Center Performance

In a data center, where a single VTrak E-Class may serve multiple host computers simultaneously, it can deliver up to 1400MB/sec of proven read performance and 600MB/sec of write performance. Combined with Xsan, the solution can share multiple VTrak storage volumes over a high-speed Fibre Channel network providing for scalable performance as storage is added.
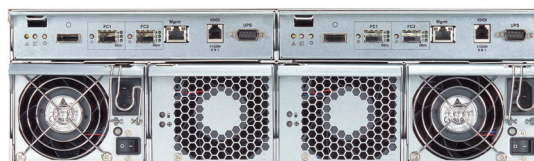
Expandability

The uncontrolled growth of data creation requires massive capacity. With the PROMISE Vtrak J-Class expansion chassis, VTrak E-Class can be expanded to support up to 80 total drives for a total of 160TB of raw capacity using the latest 2TB SATA hard disk drives.

Easy to Install and Manage

VTrak E-Class features Bonjour discovery and easy configuration through an embedded browser based management interface, WebPAM PROe, eliminating the need to install additional software. Simply open Safari, locate the unit you would like to manage, and in just a few minutes and less the ten clicks later, VTrak will up and running. The VTrak's rich feature set also gives advanced users powerful tools to rapidly deploy multiple units tuned for applications like Xsan and Final Cut Studio.

World Class Support

Promise and Apple support organizations work together to solve problems. A shared support database allows support tickets to be escalated across organizations. Mutual service level agreements between Apple and Promise allow customers to install VTrak E-Class units with the confidence that any issues they encounter will be resolved quickly and easily.

System and Controller Features

Controllers	Dual Active/Active, RAID Controllers with Failover/Failback
External I/O Ports (per controller)	Dual 4Gb Fibre Channel ports; One external 3Gb/s 4x wide SAS port for expansion.
Data Cache	2GB predictive data cache per controller with automatic write cache de-staging and 72- hour battery backup
Command Queue Depth	1024 commands per VTrak system

Operational Features

RAID Level	0, 1, 1E, 5, 6, 10, 50, 60. Supported RAID stripe size: 64K, 168K, 256K, 512K and 1MB. Background task priority tuning: adjustment of minimum I/O reserved for server use during all background tasks
Hot spares	Multiple global or dedicated hot-spare drives with revert options
Max LUNs per subsystem	256 in any combination of RAID levels and array types
Max LUNs per array	32 logical drives (LUNs); Supports LUN Carving by allowing an array to be divided into multiple logical drives; RAID level, stripe size, sector size and cache policy can be configured per LUN. Supports out of order logical drive deletion and re-creation
Max LUNs per Target ID	Up to 256, depending on host side driver and operating system
LUN Masking and Mapping	Supports multiple hosts
Operating Systems	Mac OS X, Mac OS X Server, Windows 2003/2008, Fedora Core 9, Redhat Linux, Suse Linux, VMware ESX Server v3.5/4.0

Mechanical Specification

Voltage	100-240 Vac Auto-Ranging
Current (Maximum)	8 A @ 100 Vac; 4 A @ 240 Vac (current rating with two power cords)
Power Supply	Dual 500W, 100-240 Vac auto-ranging, 50-60 Hz, dual hot swap and redundant with PFC, N+1 design
Power Consumption	108 Watts (w/o HDD), 524 Watts (under load with SAS HDD)
Operating Temperature/ Humidity	5°~40°C (-40°~60°C non operational) / Maximum 95%
Vibration	Random, 0.21 grms, 5-500Hz, X, Y, Z axis
Dimensions (H x W x D)	13.1x 44.65x 56.1 cm (5.2 x 17.6 x 22.1in)
Weight	Net weight: 38.5 kg (84.9 lbs) with 16 SATA drives
Safety	CE, FCC ClassA, VCCI, cUL, TUV, CB, BSMI, C-Tick, MIC

Apple Qualified Products and Descriptions

	Apple Part #
Promise VTrak E-Class Single Controller 4x 1TB SATA RAID subsystem (4TB)	**TV270VC/A**
Promise VTrak E-Class 8x 1TB SATA RAID subsystem (8TB)	**TV272VC/A**
Promise VTrak E-Class 16x 1TB SATA RAID subsystem (16TB)	**TV299VC/A**
Promise VTrak E-Class 16x 2TB SATA RAID subsystem (32TB)	**H1142VC/A**
Promise VTrak E-Class 16x 450GB SAS RAID subsystem (7.2TB)	**TV271VC/A**
Promise VTrak J-Class 16x 1TB SATA Expansion Chassis (16TB)	**TV274VC/A**
Promise VTrak J-Class 16x 2TB SATA Expansion Chassis (32TB)	**H1144VC/A**
Promise VTrak J-Class 16x SAS Expansion Chassis (7.2TB)	**TV275VC/A**
Promise 1TB SATA Drive Module	**TV278LL/A**
Promise 2TB SATA Drive Module	**H1143LL/A**
Promise 450GB SAS Drive Module	**TV279LL/A**
Promise VTrak Subsystem Service Parts Kit	**TV276ZM/A**
Promise VTrak Expansion Chassis I/O Service Parts Kit	**TV277ZM/A**